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# Solution Acquisition Planning

## Facilitator Guide



**Facilitator  
Guide Notes**

### **Purpose:**

- The Solution Acquisition Planning Coaching Session Facilitator Guide is designed to provide coaching session facilitators with all the needed information to lead the SAP Coaching Session.
- The Solution Acquisition Planning Coaching Session is designed to coach participants on how to complete Solution Acquisition planning activities in order to operate within the Software Engineering Institutes (SEI) Capability Maturity Model.
- This coaching session assumes that participants have an understanding of Solution Acquisitions and how to complete typical project planning activities. Participants should also have some experience in preparing an SFA business case for review.

### **Coaching Points:**

- Encourage participants to use each other as resources.
- Point out that training materials are fictionalized based on estimations from real data.
- Take note of questions requiring follow-up.
- Ensure you are keeping track of class timing and pace the course appropriately.
- Help participants manage work time.
- Share key learning points with entire group.
- Ensure you have an accurate understanding of all the material covered throughout the Coaching session.



**Facilitator  
Guide Notes**

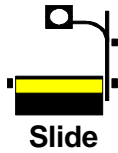
### **Logistics:**

- This course should be completed within a 90-minute time frame (with an optional 30-minute demo/ walk-through of the Estimating Worksheet, Solution Acquisition Plan, and/ or IT Cost Estimating Tool).
- The course should be held in a conference room with no more than fifteen participants in each coaching session.
- A LCD projector and appropriate supporting documentation is needed for each course.
- A flip-chart and markers are necessary for writing group questions and providing examples.
- Pencils and paper should be provided for all participants.
- A sign-in sheet should be used for tracking attendance.

Coaching session invitations should be sent out at least two weeks prior to the session with reminders sent 2-3 days before the session.

### **Coaching Session Overview:**

- The SAP Overview Presentation:
  - Provides an overview of SAP and how the activities fit into the SLC
  - Contains an Optional Acquisition Planning Activity



1

### Introduction



### Welcome

- Introduction
- Ask everyone to take a seat
  - Welcome participants to the course.
- Introduce facilitators.
  - Class Guidelines – Please turn off cellular phones and pagers.
- Parking Lot chart for potential participant questions that fall out of the scope of the class.



**Facilitator  
Note**



**Tool**

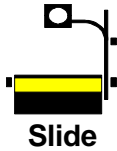


### EXPLAIN:

- Allow the presenters to introduce themselves, telling facilitators where each is from within SFA or for which operating partner they work.
- We will be walking through a presentation that gives an overview of **Solution Acquisition Planning** and Solution Acquisition planning activities
- We expect the course to last approximately 90 minutes (or 2 hours if optional demo is to be included).
- Feel free to ask questions as we go along, and I will answer or place the questions in the “parking lot” to address later.

# Solution Acquisition Planning

## Facilitator Guide



Slide

2



- Solution Acquisition Planning (SAP) Overview
- SAP in the Vision Phase
  - Estimating Activities
  - Acquisition Strategy / Beginning the Plan
- SAP in the Definition Phase
  - Updating the Plan
  - Acquisition Management
- Review and Summary



Purpose



Facilitator  
Note

### SAP Agenda for Overview Presentation

- Give overview of awareness presentation topics.
- Read through all agenda items.
- Ensure you are pointing to agenda items or addressing audience with eye contact, but not reading agenda from overhead.
- Attempt to never turn your back to the audience.
- **Use Flip-chart to record class participants' expectations for participating in the class.**

1  
min.

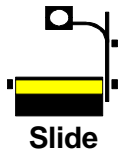


### **Read:**

- Solution Acquisition Planning (SAP) Overview**
- SAP in the Vision Phase**
  - Estimating Activities
  - Acquisition Strategy / Beginning the Plan
- SAP in the Definition Phase**
  - Updating the Plan
  - Acquisition Management
- Review and Summary**

# Solution Acquisition Planning

## Facilitator Guide



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### What is Solution Acquisition Planning (SAP)?

SAP is similar to hiring an architect to build your home...



You would never let an architect begin building without approving a detailed plan that stated:

- Who would do the work?
- Duration of the work?
- Cost of the work?
- Dependencies?



### SAP Analogy

- Understanding that Solution Acquisition is a process that should be managed, just like any other process requiring a plan.
- Explain how home building is similar to building a system or acquiring a solution from a planning perspective.
- Ask if any class participants would like to describe a recent “contracting” or “planning” activity they may have had an experience with.
  - Did the activity go well?
  - Would appropriate plan management have helped the activity run more efficiently?

4  
min.



**EXPLAIN:**

- **Acquisition is the process of obtaining products and services through negotiating contracts with providers.**
- Before deciding to become a homeowner, some considerations may be:  
**Affordability, Style, Location, Buy or Build**  
**(These decisions are part of preparing or planning.)**
- **The buyer hires an architect to design the home based on all the buyer's specifications, including how many rooms, how high the ceiling, etc.**
- The buyer will meet periodically with the architect until the design is agreed upon.
- A contract is signed with requirements and deadlines indicated.
- The architect and construction company build the home.
- The buyer will visit the house periodically to ensure that construction is of quality and on schedule.
- **In SAP, SFA acts as the home buyer and the blocks are the essential components of solution acquisition with System Acquisition Planning acting as the mortar to “glue it all together.”**
- SFA hires a contractor to acquire an IT solution for an SFA business need.
- SFA and the contractor develop a plan for acquiring the system.
- SFA meets with the contractor periodically until all the design specifications are understood and documented.
- SFA and the contractor sign an agreement with specifications and deadlines indicated.
- SFA oversees the development to ensure the product is quality and meets all specifications.

# Solution Acquisition Planning

## Facilitator Guide



Slide

4



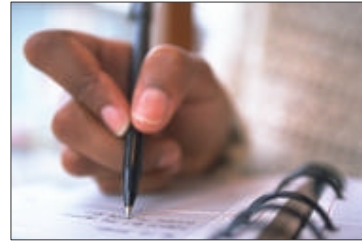
Solution Acquisition Planning (SAP) ensures that planning documents are prepared during solution acquisition planning and maintained throughout the process.

SAP enables SFA to comply with:

- GPRA
- Brooks Act
- Clinger-Cohen
- FASA

Components of SAP Involve:

- Estimating Acquisition Time
- Estimating Acquisition Costs
- Recording Actual Time
- Recording Actual Cost



Purpose



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### SAP Definition

- Understanding what Solution Acquisition Planning entails.

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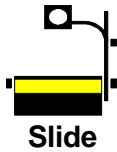
- Point out estimating and recording actuals as primary purposes of SAP.
- ITMRA – Information Technology Reform Act (part of Clinger-Cohen)
- FASA – Federal Acquisition Streamlining Act

**EXPLAIN:**

- Acquisition is **NOT** procurement and it is **NOT** contracting. But procurement and contracting are part of acquisition.
- Acquisition begins when an agency has a business need that must be addressed. Decisions on this need follow legislation (**GPRA** – Government Performance Results Act).
- Legislative reform of the acquisition process has supplemented IT procurements governed by the **Brooks Act** (The primary goal of the Brooks act is to ensure IT acquisitions are conducted in a manner that achieves full and open competition).
- Recent legislation has transformed the acquisition activity into an entire life cycle from planning to performance.
- Capital planning, investment review, and performance measurement are integral to the acquisition life cycle and governed by **ITMRA** (Information Technology Reform Act) of the Clinger-Cohen Act.
- Acquisition cost, schedule goals, and performance fall under the **FASA** (Federal Acquisition Streamlining Act) legislation.

# Solution Acquisition Planning

## Facilitator Guide



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### SAP Objectives

As described in the Vision phase of the SLC, SAP begins with the determination of a business need.

- A well developed Acquisition Strategy is documented
- Repeatable planning effort takes place
- Project manager manages and measures the plan
- Improve planning effort based on benchmarks established over time
- Clearly define SFA and contractor responsibilities

SAP



Purpose

### SAP Objectives

- Explain the purpose for performing Solution Acquisition Planning.

2  
min.



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Note

- Emphasize the **objective** of developing a repeatable process to increase understanding of Solution Acquisition Planning and ensure planning is performed for projects.

Use **Flip-chart** to record participants' ideas around what is involved with planning with SFA (eg: TO, RFP, business need, identification, IRB/DSG).

**EXPLAIN:**

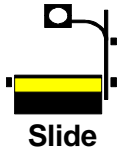
- Examples:
  - Business Case
  - Business Need
  - DSG Review

**DSG Review**

- Work can be organized around the tools provided by SAP work products. You will be coached on how to use these tools and how to get the most out of them.
- The SAP tools give an outline of what is expected. The processes are well-documented and defined and everyone understands their role.
- Doing the same job the same way every time is the main benefit of a repeatable process.
- *A well developed Acquisition Strategy is documented*
  - Templates and processes have been developed for use.
  - All work product templates have been approved by executives and will facilitate the process.
- *A reasonable, documented planning effort takes place*
  - Executives are aware of what your project will deliver.
  - Executives are aware of what your project will not deliver.
  - Expectations are managed.
- *Plan, account manage, and measure Acquisition costs and support*
  - A firm foundation is established to build your Work Breakdown Structure (WBS).

# Solution Acquisition Planning

## Facilitator Guide



Slide

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### Benefits of SAP

SAP



SAP provides a process that allows for better solution acquisition planning, enabling more projects to come in on-time and within budget.

- SAP helps SFA meet Performance Objectives to:
  - Increase Customer Satisfaction
  - Increase Employee Satisfaction
  - Reduce Unit Costs
- Results:
  - Using the appropriate processes means higher quality work (Increased Employee and Customer Satisfaction)
  - Repeatable processes means lower cost (Lower Unit Costs)



Purpose

### Benefits of SAP

- Explain the benefits of Solution Acquisition planning.

**2  
min.**



Facilitator  
Note

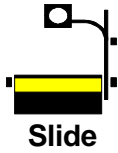
- Emphasize accomplishing PBO objectives.
  - Increased Customer Satisfaction
  - Increased Employee Satisfaction
  - Decreased Unit Costs
- Do not exaggerate benefits of SAP; simply state the **facts**, which speak for themselves.

**EXPLAIN:**

- The SFA enterprise-wide continuous process improvement program is part of the build and roll-out of the Solution Life Cycle.
  - **improve** predictability and measures for acquiring information systems and services.
  - **reduce** cost and schedule of acquisition
  - **remove** organizational barriers to effective performance
- Sap enables the development of historical data from a consistent planning process that all SFA efforts can use in their planning efforts.
  - Better planning enables SFA to progress through the planning process more quickly and effectively which results in faster delivery in solutions to our customers
- **SFA will gain the benefits of repeatable processes by using SAP within the SLC.**
- Experts estimate that 90% of product problems can be attributed to problems in the process.
- Hughes Aircraft has reported a business value (ROI) for their process improvement activities of 4.5 to 1.
- Tinker Air Force Base has calculated the business value of their improvement activities to be 6.27 dollars per each dollar invested.

# Solution Acquisition Planning

## Facilitator Guide



Slide

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### SAP Tools

SAP



- Solution Acquisition Planning Process Guide
- Solution Acquisition Plan Template
- Planning Estimating Worksheet
- Cost Estimating Tool



Purpose



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### Agenda

- Provide participants with list of SAP tools and resources.
- Direct participants to where they may find these tools.
- Available via the SLC website or the technology handbook when SLC Version 2.0 is released
- Hand out SAP Process Guide

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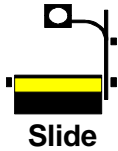


**EXPLAIN:**

- The SAP **Process Guide** details the steps within the process and provides the context of responsibilities and when to complete activities.
- The SAP **Template** will be used to create the project's Solution Acquisition Plan and is located in the SAP Process Guide.
- The **Acquisition Planning Estimating Worksheet** will capture SFA and contractor resource time and effort during the planning phase of a given acquisition. This template captures hours for:
  - Business Case Development
  - Solution Acquisition Planning Activities
  - DSG and IRB Reviews
  - SoO Development
  - Task Order Development
- Additional information includes:
  - The **SAP High Level Process Flow**, which shows the processes needed to complete Solution Acquisition planning.
  - The **Acquisition Planning Estimating Procedures**
  - The **Planning Policy**

# Solution Acquisition Planning

## Facilitator Guide



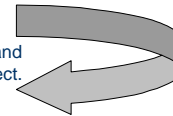
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The SLC is a framework to guide a successful Solution Acquisition from business need to deployment and support. The outline for the SLC is illustrated below.

Planning/ Managing	Acquisition Planning and Managing				
	Vision	Definition	Construction	Deployment	Support
	Problem Assessment	System Requirements	Detailed Design	Deployed Solution	Production Services
	Solution Recommendation	Preliminary Design	Accepted Solution		

The Solution Acquisition Plan manages the processes used and the deliverables produced throughout the lifecycle of the project.



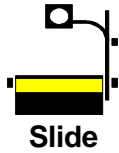
### Solution Acquisition in the SLC

- Explain the SLC as a framework for Solution Acquisitions.
- Emphasize that Solution Acquisition activities take place throughout SLC.
- Point out Vision, Definition, Construction, Deployment, and Support phases of SLC on overhead.
- Point out that the **SAP helps oversee activities throughout the SLC.**

3  
min.

**EXPLAIN:**

- By documenting existing processes, the SLC is a guide for how to best **avoid unnecessary steps and reuse the best processes and procedures.**
- Employees use the SLC as an outline for Solution Acquisition. This outline provides **defined, repeatable, efficient** procedures that Solution Acquisition project managers can tailor to meet their projects needs.
- SFA is currently undergoing a Process Improvement effort for the SLC. This process improvement effort will focus on six **Key Process Areas (KPA's)** within the SLC and improving the processes and procedures surrounding those areas. This process improvement initiative will increase the efficiency of the SLC.
- For SFA, participating in Solution Acquisition process improvement efforts will better position the organization to achieve the performance objectives of
  - **increasing** customer satisfaction,
  - **increasing** employee satisfaction and
  - **reducing** unit costs.



Slide

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SLC is further enhanced by SFA's Solution Acquisition Capability Maturity Model (CMM). This is a framework for organizational improvement.



The SLC is enhanced by 2 of Software Engineering Institute's CMM's:

- [Software Acquisition CMM](#)
  - addresses the project's **entire software acquisition** process and life cycle support
- [Software CMM](#)
  - model for **benchmarking** and **improving** the software development process



Purpose



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Note

### CMM in the SLC

- Understanding why we are undergoing process improvement.
- Understand how SLC was developed and why.

2  
min.

- Ask audience if they have ever heard of **CMM**.
- Explain CMM and give stats on how it has helped projects.
- Explain how CMM helps process improvement efforts.

**EXPLAIN:**

- CMM identifies KPAs that organizations should focus their efforts on **to ensure their Solution Acquisition projects are run efficiently.**

- These KPAs align with different phases of the SLC. Defining and developing **repeatable processes and procedures** within each KPA will help SFA increase the efficiency of the SLC.
- SFA has taken KPAs from both Software Acquisition CMM and Software CMM and merged the best, most applicable practices from each together to form the SFA Solution Acquisition CMM. This is a tailored model expected to provide maximum benefit to and address our specific business needs.

***Why are we doing this?*****The catalyst for the CMM is historical IT industry practices:**

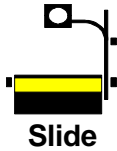
- Nearly one-third of IT (hardware and software) projects are cancelled before completion.
- Over half of the project budgets exceeded 189 percent of original estimates.
- The average schedule overrun for projects that were in difficulty was 222 %.

**How CMM will help:**

- Provides a series of process steps to guide acquisition planning, therefore adding a measure of quality to the process.
- The CMM is also a management and communication tool that organizes relationships between buyer, supplier, and user.
- An organization's maturity is achieved through successful implementation of KPAs that are well-defined.
- By following the KPAs, you can expect predictable results that are repeatable and measurable.

# Solution Acquisition Planning

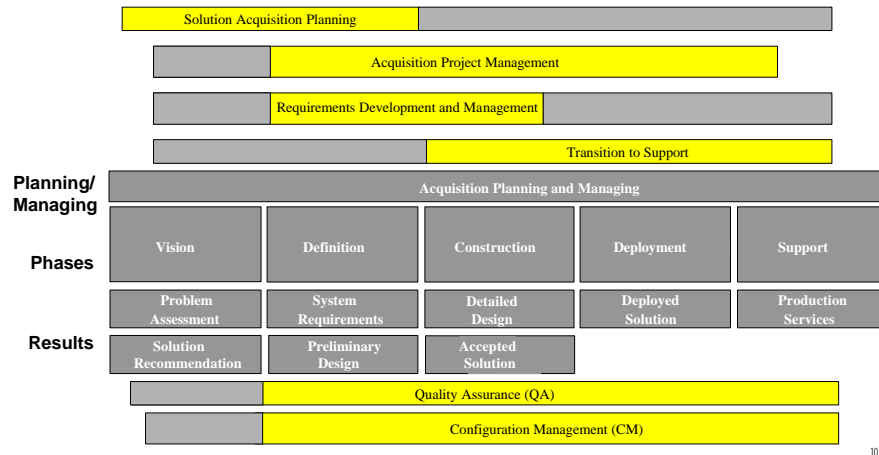
## Facilitator Guide



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**The 6 Key Process Areas were chosen from the Software Acquisition and Software CMMs.**



10



## SLC and CMM

- Show how six KPAs fit into the SLC.
- Show the six KPAs SFA has picked from the CMM to make them operational at Level 2.

**3 min.**

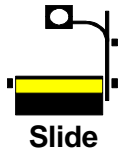
- Point out six KPAs.
- Each KPA is explained in a corresponding Awareness Presentation.
- For each KPA, gray represents the area where the activity is performed, while yellow indicates where the majority of activities are completed.

**EXPLAIN:**

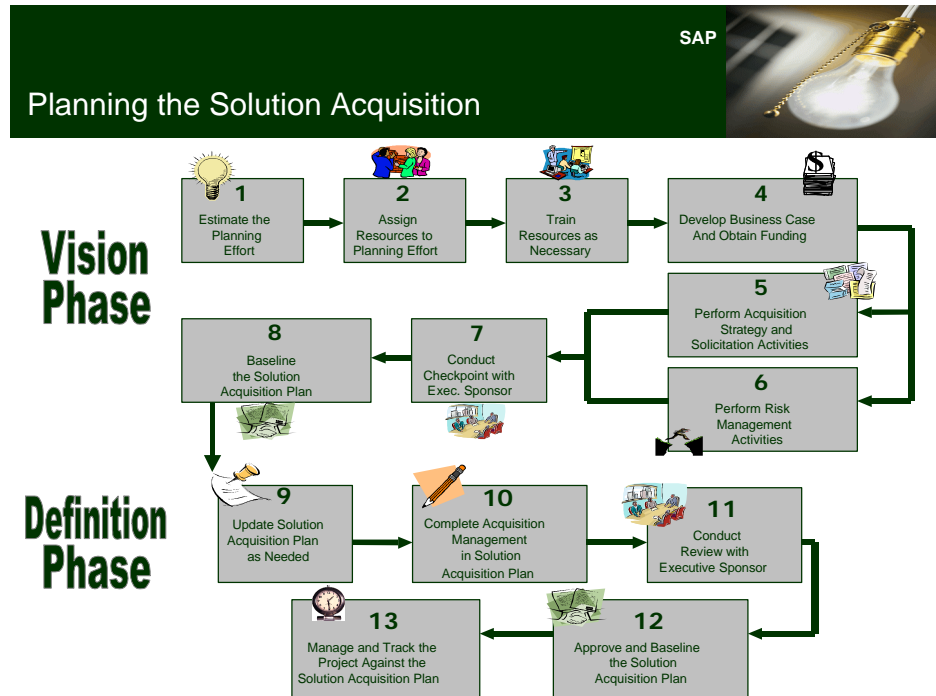
- SFA has carefully chosen these **6 KPAs** as target areas to concentrate their Solution Acquisition Process Improvement Efforts.
- Five high level phases compose the SLC: **Vision, Definition, Construction, Deployment, and Support**
- The SLC is comprised of various recommended processes and procedures to guide Solution Acquisitions within SFA. These processes are considered “**best practices**” for use during Solution Acquisition process planning, development, and deployment
- The processes within the SLC will have increased **efficiency, thereby saving time, money and effort.**
- The SLC Process Improvement effort will enable SFA Solution Acquisitions to operate at a **higher maturity** within CMM and satisfy government process improvement standards set forth by Congress.
- **The Acquisition Plan will be maintained throughout the entire lifecycle of the project and will end upon completion of the project.**

# Solution Acquisition Planning

## Facilitator Guide



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**Purpose**



**Facilitator Note**

### Planning the Solution Acquisition

- This is an overview for Solution Acquisition Planning.

**2 min.**

- Review all 12 steps of SAP at a high level.
- This should be a quick reference to show activities completed within the previous yellow section of the KPA.
- Next, we will walk through each component of the process.



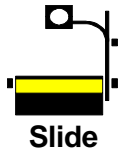


### EXPLAIN:

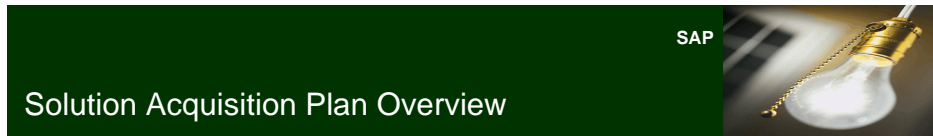
- The Solution Acquisition Plan is a tool used by SFA to **plan** and **manage** the acquisition of solution development projects.
- It is necessary to create a Solution Acquisition Plan to develop an **overall business strategy** for managing the acquisition.
- The plan is developed in accordance with the Solution Life Cycle (SLC). In particular, the Solution Acquisition Plan is primarily created in the **Vision Phase** and maintained throughout the **remaining phases** of the SLC.
- This process is found in the **Solution Acquisition Process Guide**.
- The Solution Acquisition Plan provides project teams with a **comprehensive step-by-step process** for planning the project.
- We will follow this process to create a Solution Acquisition Plan.

# Solution Acquisition Planning

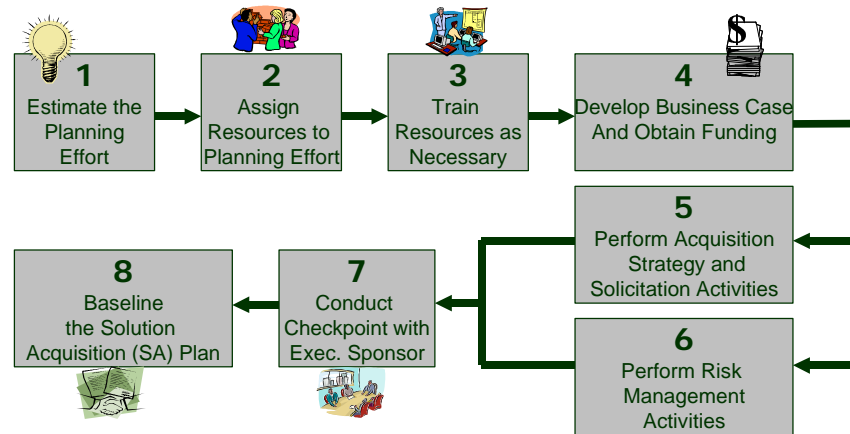
## Facilitator Guide



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### Solution Acquisition Plan in the Vision Phase:



### Solution Acquisition Plan Overview

- Review Solution Acquisition Plan in the Vision Phase.

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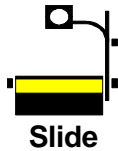
- Discuss Overview.
- Read through the eight-step process at a high level.
- This is the **25-minute mark** in the presentation.



### EXPLAIN:

- Acquisition Planning begins after a **business need** is identified.
- As a result, a Solution Acquisition Plan is initiated.
- This plan will be used by SFA as a tool to **manage** the solution acquisition project.
- Now we will review the **initial 8 steps** of Acquisition Planning contained in the Vision Phase.

**Now, we will discuss the first process in this flow, Estimate the Planning Effort, and how to complete the Estimating worksheet.**



Slide

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These steps are performed pre-business case to estimate the number of hours to plan the acquisition and obtain funding.



1

Estimate the  
Planning  
Effort



2

Assign  
Resources to  
Planning Effort



3

Train  
Resources as  
Necessary

1 Complete Estimating Worksheet

2 Find appropriate Acquisition Resources

3 Find needed/available training



Purpose



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Note

### Pre-Business Case Planning

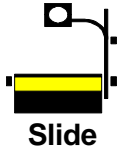
- Outline the first three steps of Solution Acquisition Planning.
- Mention that we will go into more detail about each of these steps in the following slides.

2  
min.



### **EXPLAIN:**

- Complete Estimating Worksheet.
- Consider Acquisition Resources.
- Additional Training may be necessary.



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### Using the Estimating Worksheet

SAP



The Estimating Worksheet is a tool to:

- Forecast planning activities through the Task Order award
- Estimate, monitor and compare actual data with the initial estimated data
- Track data consistently and accurately, which will enable future, reliable benchmarks to be determined



Purpose



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Note

### Estimating Worksheet Overview

- Give overview of the Estimating Worksheet.
- Discuss Acquisition Planning Estimating Worksheet in general.

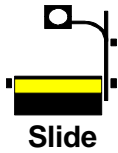
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**EXPLAIN:**

- The **Estimating Worksheet** captures the number of days of effort involved for each acquisition activity. It is a learning tool that allows the comparison of the actual time each activity took against the estimate, enabling benchmarks to be established.
- The worksheet should be populated to reflect the planning activities.
- The Estimating Worksheet should be completed by the **Project Manager**.
- The sections contained in the Estimating Worksheet are:
  - Business Case
  - DSG
  - IRB
  - SoO
  - Task Order
- The numbers entered into the tool are equal to **Full-time Equivalent Working Days**.

# Solution Acquisition Planning

## Facilitator Guide



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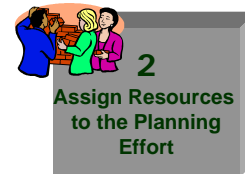
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### Resources

SAP



#### Identify and Assign Roles to Members of Acquisition Team.



- Roles may include:
  - Project Manager
  - Subject Matter Expert
  - Information Technology Representative (ITR)
- All SFA and Mod Partner personnel involved in the project should be listed in “**Acquisition Resources**” chart of Solution Acquisition Plan
- Typically, members of the Acquisition Team will roll onto the IPT



Purpose



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### Resources

- Discuss assigning resources.
- Discuss assigning roles to various members of the project.

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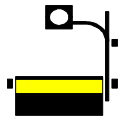


### EXPLAIN:

- In the “**Acquisition Resources**” chart, the name, contact details (phone number, etc.), and organization of the person assigned to a particular role are identified.
- Acquisition Resources are assigned at this point in the process in order to complete the acquisition planning. This serves as an “early IPT.”
- Many of the Acquisition Planning Resources will fill roles on the project IPT.

# Solution Acquisition Planning

## Facilitator Guide



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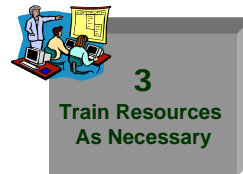
### Training

SAP



Determine training needed to ensure each individual team member has adequate skills for the Acquisition project.

- Document this information for future reference in the Solution Acquisition Plan.
- Several members of the team may require additional training to expand their existing skill sets.



Purpose



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Note

### Training

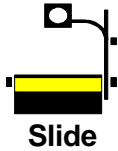
- Discuss additional training that may be required.
- Suggest any current classes being offered by SFA.

2  
min.



### EXPLAIN:

- Those who **have** participated in previous Acquisition Activities may not need additional training.
- Suggested training may include topics such as:
  - IRB process
  - Business Case Development
  - SLC
  - SAP



Slide

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### Investment Review

Once the estimating tools and initial planning steps have been completed, the IRB process begins.



- The IT Investment Management Procedures are followed to obtain funding.
- The Business case is developed and must ultimately receive approval from IRB.
- As this task is completed, actuals will be entered in the Estimating Worksheet.



Purpose



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Note

### Investment Review

- Review the Investment Review process, which occurs after the initial planning steps are completed.

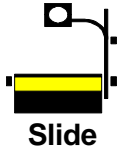
4  
min.

- Next, we will review the IT Cost Tool.
- Explain that many of the sections within the Solution Acquisition Plan are also found within the business case.



### **EXPLAIN:**

- Remember, the Solution Acquisition Plan is still being built.
- In the future, as the business case evolves, additional sections of Solution Acquisition Plan will be contained in the business case.
- Eventually, the business case as a whole will be incorporated into the plan.
- Now we will discuss the IT Cost Estimating Tool.
  
- The following sections from the Solution Acquisition Plan are also in the business case:
  - Initiative Description
  - Acquisition Strategy
  - Benefits
  - Costs
  - Budget
  - Milestones
  - Technology
  - Risks
  - Measurements



Slide

18

### IT Cost Estimating Tool

SAP



Objectives and Benefits of the tool include:

- Consistency
- Checklist of cost items
- Enhanced validation
- Rigor and thoroughness to the estimate
- Easy to Use – Does not require financial expertise
- Supports SLC and CMM efforts, also 300B reporting



Purpose



Facilitator  
Note

### IT Cost Estimating Tool

- Review IT Cost Estimating Tool at a high level.

4  
min.

- Go over the objectives and benefits of the tool.

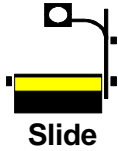
**EXPLAIN:**

- **Consistency** – Quickly recognize that this is a reliable estimate.
- **Checklist** – Will provide checklist of cost items for user, so that no significant costs are buried or overlooked. At the same time allows users to enter in additional “other costs”, so does not limit.
- **Validation** – Column for checklist of validation with source, also provides contact name for each cost item. In some cases this is the project lead and their modernization partner representative.
- **Rigor and Thoroughness** – More detailed than most cost estimates now, provokes a thought process that considers all costs necessary.
- **Easy to use** – Most estimations are driven from a few simple inputs, no extensive research on how to estimate costs needs to be done on the user’s part.
- **Supports:**

**SLC** – Each cost item has been categorized to a phase of the SLC, subtotals by phase are listed for use in the software acquisition process

**CMM** – More detailed and reliable for future standardization of processes

**300B reporting** – information about SFA FTE’s and GS Level is input for reference by the CFO’s office, as well as an estimation for financial management if the project uses FMS.



19

### How the IT Cost Estimating Tool is Used

SAP



All estimations are based on user inputs from this worksheet

- Short descriptions and contact information provided as inputs
- Ability to enter in "other" cost items that do not appear in checklist
- Number of SFA FTE's and GS Level captured for use by CFO and 300B reporting

#### Estimations

- All workday and cost estimates shown here.
- Shows contact information for each cost item in comments
- Maps each cost item to the SLC
- Ability to enter actual cost data and see variances and flagged items



Purpose



Facilitator  
Note

### How to Use the IT Cost Estimating Tool

- Outline features of the Cost Estimating Tool.

4  
min.

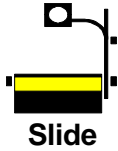
- This tool started as an Accenture template for the purpose of accounting for Technical Architecture costs on current projects.
- We greatly expanded upon their original template, and estimating basis (which are Accenture best practices estimates).
- We also worked with SFA personnel to get their input on the tool and estimating basis, and then changing/revising the tool where we received input.



**EXPLAIN:**

**Two sheets: Inputs and Estimations.** There will also be documentation defining each input on the input sheet and cost item on the estimation sheet and how to use the tool.

- Costs are broken out into both **development** and **operations**. This maps each cost item to a phase of the SLC.
- First column is the **name of the cost item** and in comments is a name for contact information regarding the cost.
- Next two columns are estimations for **workday** and **costs**.
- Third column is where **actual costs** can be entered in for the **control** and **evaluate** phases of our investment management process.
- Next two columns are **variances** and a **flag**. The flag column says ok normally, but will turn red and say 5% over/under if your actual cost is either 5% over or under your estimate for the cost item. The % over/under flag can be set to any appropriate percentage desired.
- Next column is **estimating basis**. Most are a percentage of a subtotal, these percentages can be tweaked to fit each individual project. If costs are entered directly as opposed to being estimated by the tool, the estimating basis column will say which input the cost references.
- The last column asks the user if the cost item is validated. This is to help ensure that each estimation has been checked with the correct sources.
- ALL cells on this worksheet are locked except for actual costs, estimating percentages and cost validation columns.
- **Subtotals by SLC phase are to be referenced for the SAP process.**



Slide

20

### Acquisition Strategy

SAP



Acquisition Strategy and Solicitation Activities  
address the following five areas:

- Solicitation
- Sources
- Competition
- Contract Considerations
- Acquisition Constraints



- At conclusion, SOO and TO actuals are entered into the Estimating Worksheet.



Purpose



Facilitator  
Note

### Acquisition Strategy in the Solution Acquisition Plan

- Discuss areas of Acquisition Strategy.

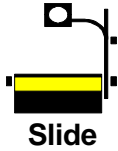
4  
min.

- Define areas.
- Address why Project Management would perform Acquisition Strategy and Solicitation Activities.

**EXPLAIN:**

- **Solicitation** - Describe **who** is responsible for preparing the **TO**, **SOO**, and if applicable, the **RFP**.
- **Sources** - Indicate the **prospective sources** of supplies or services that can meet the need of this project. List the **most likely** offerors for the requirement, and/or the manufacturer and model of the equipment that will most likely be offered. Describe the **nature and extent** of market research conducted and what were the major findings. If a Modernization Partner project, describe the **rationale for acquiring the solution from the Modernization Partner**.
- **Competition** - Describe how competition will be **sought, promoted, and sustained** throughout the course of the acquisition, including any performance requirements that will be required. Also, address small and/or disadvantaged business considerations.
- **Contract Considerations** - For each contract contemplated, discuss **contract type selection**; use of multiyear contracting, options, or other special contracting methods, ex: performance-based. Reconcile these elements to the acquisition risks previously identified.
- **Acquisition Constraints** - Constraints differ from risks in that they already exist and cannot be changed. For example, risks can be prevented, where constraints are constant to the environment. Constraints can be **managed** and therefore should be **identified** to ensure that they are **managed throughout the life cycle**.

**Address why Project Management would perform Acquisition Strategy and Solicitation Activities.**



21

### Perform Risk Management

SAP



Risk Management is a need that is addressed in the Solution Acquisition Plan. Initial, high level risks are identified in the Business Case, but the bulk of Risk Management is performed here.

- Risk is managed by the Project Manager.
- The Risk Management tools will be found in the Project Management Workbook.
- Risks will be monitored throughout the project.
- Risk is “mitigated” as need arises.



Purpose



Facilitator  
Note

### Risk Management

- Discuss Risk Management.

2  
min.

- Risk Management is a need that is addressed in the Solution Acquisition Plan.
- Initial, high level risks are identified in the Business Case, but the bulk of Risk Management is performed here.

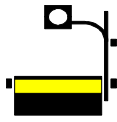


### **EXPLAIN:**

- Risk is managed by the Project Manager.
- The Risk Management tools will be found in the Project Management Workbook.
- Risks will be monitored throughout the project.
- Risk is “mitigated” as need arises

# Solution Acquisition Planning

## Facilitator Guide



Slide

22

### Review and Baseline

SAP

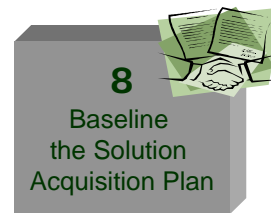


After the Solution Acquisition Plan is completed, it is reviewed and then baselined if found acceptable.

The baselined Solution Acquisition Plan should include the appropriate areas addressed in the business case, as well as what is needed to plan for a project.



**7**  
Conduct  
Checkpoint with  
Executive Sponsor



**8**  
Baseline  
the Solution  
Acquisition Plan



Purpose

### Executive Sponsor Review

- Mention checkpoint with Executive Sponsor.
- Review areas needed to gain approval and to baseline the plan.

**2  
min.**



Facilitator  
Note

- Discuss why checkpoint is important.
- Discuss both areas in the planning effort and in the business case that the baselined Solution Acquisition Plan should have.

**EXPLAIN:**

- If plan meets the approval of the **Executive Sponsor** and **other IPT members**, it will move to the next step.
- This is a **checkpoint** in the process to ensure the plan meets the expectations of the Executive Sponsor and IPT members.

As part of this checkpoint, the **actuals** should be entered and reviewed from the Estimating Worksheet.

- This step is key in achieving **process maturity**.

- **The plan is then approved and baselined.**

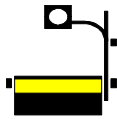
**The baseline Solution Acquisition Plan should include the appropriate areas addressed in the business case, as well as what is needed to plan for a Solution Acquisition project.**

**In review:**

- Estimate acquisition effort.
- Identify acquisition resources.
- Plan any needed acquisition training and experience
- Project Budget
- High level milestones
- Acquisition risks
- The measurements to be used as success criteria for the project.

## Solution Acquisition Planning

### Facilitator Guide



Slide

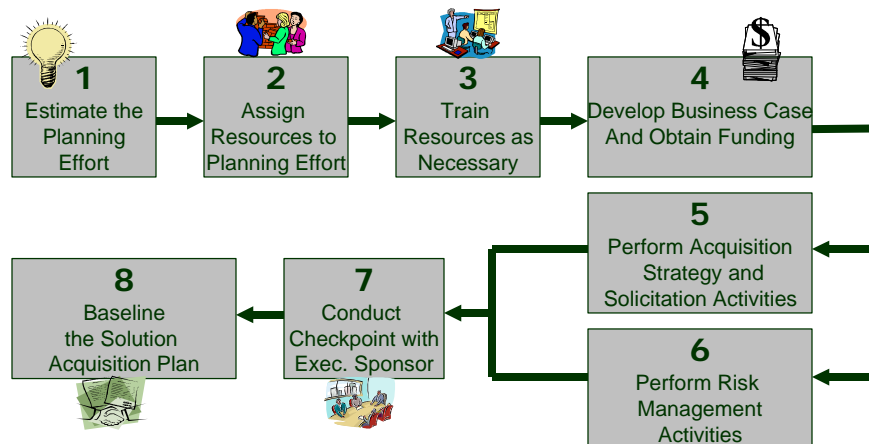
23

### Conclusion of the Vision Phase

SAP



The Solution Acquisition Plan is now baselined in the *Vision* Phase of the SLC and ready to be updated in the *Definition* Phase.



Purpose



Facilitator  
Note

### The Conclusion of the Vision Phase

- Review SAP in the Vision Phase at a high level.

4  
min.

- After reviewing steps, announce that now we will move to the Definition Phase of the SLC to review some key steps that describe how the Solution Acquisition Plan continues to evolve.





### **EXPLAIN:**

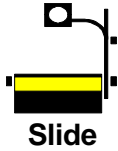
#### **Remember,**

- Estimating the planning effort involves the Estimation Worksheet.
- After assigning resources to the planning effort, they will be trained appropriately.
- Portions of the business case are developed in step four, the acquisition strategy is performed in step five, followed by risk management activities, which are performed in step 6.
- The executive sponsor and other team members must review the Solution Acquisition Plan before it is finally approved and baselined in step 8.

**These steps may occur in the Vision Phase as information becomes available.**

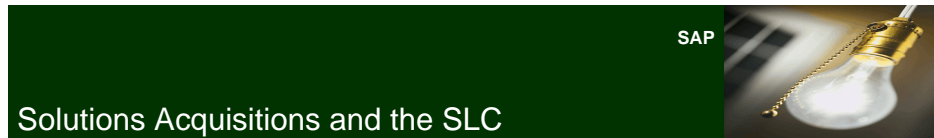
# Solution Acquisition Planning

## Facilitator Guide



Slide

24



We now move to the  
Definition Phase for  
Acquisition Planning.



Purpose



Facilitator  
Note

### On to the Definition Phase

- Review a few key points before moving to the Definition Phase.
- After discussing key points, announce that now we will review the remaining steps of Solution Acquisition Planning.

4  
min.



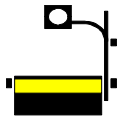
### EXPLAIN:

A few key points to remember:

- The project Solution Acquisition plan is **updated** and **used as a management tool** throughout the remaining phases of the SLC.
- Any changes to the business case and task order will most likely effect the Solution Acquisition Plan, which will then need to be updated to reflect those changes (using the change management process).
- The Acquisition Plan Estimation Worksheet should be **continually updated with actual numbers** in order to accurately track project time and costs.
- Acquisition Management activities are **updated** and **maintained** in the project Solution Acquisition Plan and used to manage the project to **meet the goals** outlined within the plan.

# Solution Acquisition Planning

## Facilitator Guide



Slide

25

### The Definition Phase

SAP



The Solution Acquisition Plan is continued in the *Definition* Phase



Purpose



Facilitator  
Note

### Introduction of SAP in the Definition Phase

- Review processes of SAP in the Definition Phase at a high level.
- Mention that we will go into more detail about each process in the following slides.

4  
min.



### EXPLAIN:

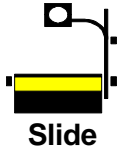
The Solution Acquisition Plan is **updated** and **continued** in the Definition Phase of the SLC.

### The 4 Steps included in the Definition Phase are:

- Update the Acquisition Plan as Needed
- Complete the Acquisition Management Section in the Solution Acquisition Plan
- Conduct Executive Sponsor Reviews
- Approve and Baseline
- Manage and Track the Project Using the Solution Acquisition Plan as a guide

# Solution Acquisition Planning

## Facilitator Guide



Slide

26

### Updating the Plan

SAP



The Acquisition Plan will be updated as necessary based on possible changes in areas such as:

- Scope
- Costs
- Resources
- Risk
- Schedule



Purpose



Facilitator  
Note

### Updating the Solution Acquisition Plan

- Review why plan may need to be updated.

4  
min.

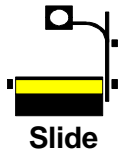
- The “actual” figures may also need to be updated in the Estimating Worksheet.



### **EXPLAIN:**

#### **Potential updates include:**

- Business case and TO changes may result in Solution Acquisition Plan updates
- Milestone completion dates for Vision Phase may need to be incorporated
- New/additional risks may need to be identified
- New resources added to IPT



Slide

27

### Acquisition Management

SAP



The Acquisition Management activities include:

- Project Management Activities
- Requirements Development and Management
- Contract Tracking and Oversight
- Evaluation
- Transition to Support
- Configuration Management
- Quality Assurance
- Measurement



7



Purpose



Facilitator  
Note

### Acquisition Management

- Review Acquisition Management Activities.
- Also mention the activities that link back to selected SFA KPA's.

4  
min.



**EXPLAIN:**

**Project Management Activities and Measurements** - include how project **issues, status, execution, funding, and expenditures** are tracked and managed

**These activities link back to the selected SFA KPAs:**

**Requirements Development and Management** - describe how software acquisition requirements will be developed and maintained and how the contract requirements will be defined

**Contract Tracking and Oversight** - explain what contractor plans and control system will be required and how they will be reviewed

**Evaluation** - defines tasks, activities, resources and critical dependencies involved in the Evaluation process, provides evidence that the evolving systems products and services satisfy contract requirements prior to acceptance and transition to support

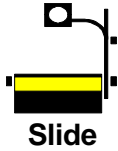
**Transition to Support** - describes the preparation for the transition and how the readiness to accept the product will be confirmed

**Configuration Management** - Refer to the project's Configuration Management Plan.

**Quality Assurance** - Refer to the project's Quality Management Plan.

# Solution Acquisition Planning

## Facilitator Guide



28

### Review and Approve Solution Acquisition Plan

SAP



- Review the Solution Acquisition Plan with team members.
- Review the Solution Acquisition Plan with the Executive Sponsor.
  - Each version will then be approved and baselined.



### Review and Approve

- Outline who the Plan will be reviewed with.

4  
min.

- Ask audience who would review his or her Solution Acquisition Plan.

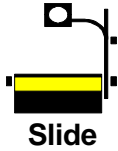


### **EXPLAIN:**

- Review the Solution Acquisition Plan with team members.
- Review the Solution Acquisition Plan with the Executive Sponsor.
- Each version will then be approved and baselined.

## Solution Acquisition Planning

### Facilitator Guide



Slide

29

### Using the Solution Acquisition Plan

SAP



- Project Management functions should be carried out and reviewed periodically.
- Continually update the plan with information from steps 9 – 13 throughout the construction, deployment and support phases.
- Evaluate the final deliverable compared to the estimated Solution Acquisition Plan.
- Use the Solution Acquisition Plan to manage and track the project.

13

Manage and Track  
Project Against  
the Solution  
Acquisition Plan



Purpose



Facilitator  
Note

### Using the Solution Acquisition Plan

- Review how the to manage and track the project against the Plan.
- Ask audience if they could see such a plan being a useful management tool on their project.

4  
min.

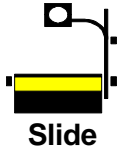


### **EXPLAIN:**

- Project Management functions should be carried out and reviewed periodically.
- Continually update the plan with information from steps 9 – 13 throughout the construction, deployment and support phases.
- Evaluate the final deliverable compared to the estimated Solution Acquisition Plan.
- Use the Solution Acquisition Plan to manage and track the project.

## Solution Acquisition Planning

### Facilitator Guide



30

### Conclusion of the Definition Phase

SAP



The Solution Acquisition Plan is completed in the Definition Phase, but maintained throughout the entire lifecycle of the project.



Purpose



Facilitator  
Note

### Conclude the Definition Phase

- Review steps of the Definition Phase.

4  
min.

- These steps are repeated throughout the remaining phases of the SLC.

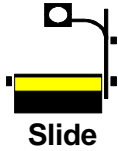


### **EXPLAIN:**

- Solution Acquisition Plan is maintained throughout the Support Phase.

# Solution Acquisition Planning

## Facilitator Guide



Slide

31

### Review and Summary

SAP



- **Solution Acquisition Planning (SAP)** ensures that planning documents are prepared during solution acquisition planning and maintained throughout the process
- SAP begins with the **determination of a business need** and endures **throughout the lifecycle**
- SAP provides **streamlined, predictable, repeatable, measurable** processes that help SFA meet Performance Objectives:
  - Increased Customer Satisfaction
  - Increased Employee Satisfaction
  - Reduce Unit Costs



Purpose



Facilitator  
Note

### Review and Summary

- Review topics covered in awareness presentation.

4  
min.

- Ask participants to explain topics to you.
- Review Topics Covered.
- Tell participants we will now begin our first activity.



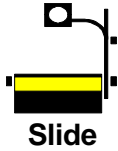


### **EXPLAIN:**

- Solution Acquisition Planning (SAP) ensures that planning documents are prepared during solution acquisition planning and maintained throughout the process
- SAP begins with the determination of a business need and endures throughout the lifecycle
- SAP provides streamlined, predictable, repeatable, measurable processes that help SFA meet Performance Objectives:
  - Increased Customer Satisfaction
  - Increased Employee Satisfaction
  - Reduce Unit Costs

# Solution Acquisition Planning

## Facilitator Guide



Slide

32

So what did we do?

SAP



### During this session we...

Achieved understanding of:

- SLC and CMM
- SAP Defined
- SAP in the SLC
- Benefits of SAP

Accomplished a walk-thru of:

- Solution Acquisition Planning Process
- Estimating Worksheet
- IT Cost Estimating Tool



Purpose



Facilitator  
Note

### Review and Summary

- Review what was accomplished during presentation.

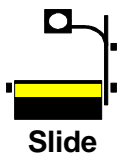
4  
min.

- Ask participants to explain what they learned to you.
- Review What we Did.
- Tell participants we will now begin our first activity.



### EXPLAIN:

- Ask participants if they feel comfortable with the Solution Acquisition Plan and Estimating Worksheet .
- As participants if they understood the point of these tools.



33

Team Activity

SAP



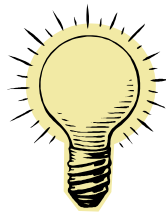
## Solution Acquisition Planning

### Facilitator Guide



Team Activity

### Acquisition Planning Estimating Activity



31

### Optional Estimating Worksheet Activity



Purpose

Divide participants into teams. Then, walk them through Step 1 of the process in detail.

**6  
min.**



**Facilitator  
Note**

- This is an optional activity, performed only if time permits.
- Divide the session into teams by assigning participants into group 1, 2, etc.
- Encourage participants to ask questions of each other and yourself.



**Tool**

Hand out (if not done previously):

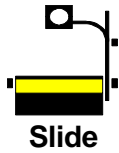
- Blank Acquisition Planning Estimating Worksheet
- Estimating Worksheet Procedures



### **EXPLAIN:**

- Refer to the blank Acquisition Plan Estimating Worksheet and fill it out.
- Don't forget to use the "Acquisition Planning Estimating Worksheet Procedures" to help guide you through the process.

First, we will review the estimating worksheet in more detail.



Slide

34

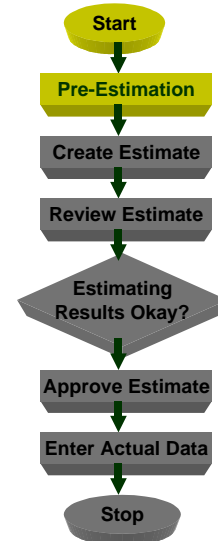
### Pre-Estimation Considerations

SAP



**Before starting the Estimating Worksheet, the following should be considered:**

- What are estimating risks?
- What are estimating assumptions?



### Step 1 of Estimating Worksheet – Pre-Estimation



Purpose

Discuss Pre-Estimation Considerations.

3

min.



Facilitator Note

- Refer to the Estimating Worksheet Procedures for examples.



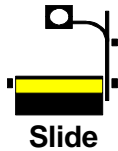
Tool

- Estimating Worksheet Procedures



### **EXPLAIN:**

- Before completing the Estimating Worksheet consider:
  - **Assumptions**
    - (ex. Project constraints, prior project information)
  - **Risks**
    - (ex. Inexperienced estimators, lack of familiarity with the work to be performed, new technologies)



Slide

35

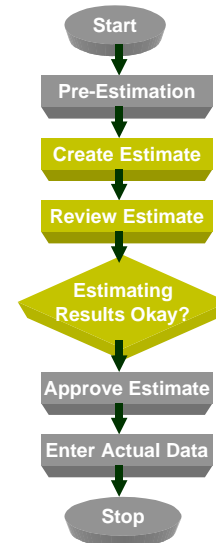
### Estimating Activities

SAP



#### Complete the Estimating Worksheet

- Complete the estimates aligned to the 5 stages of the Planning process:
  - Business Case
  - Decision Support Group
  - IRB
  - SOO
  - TO
- Complete the Rationale for Estimation
- Review the Completed Estimating Worksheet
  - Conduct Peer and Independent Reviews
  - Acceptable estimates are approved
  - Unacceptable/ unreasonable estimates are reworked
- Total Estimated Acquisition Planning Days will be used in IT Business Case Cost Estimating Template and to complete section 3.4 of the SA Plan.



Purpose

### Completing the Estimating Worksheet

Learn how to Populate the Estimating Worksheet.

6 min.



Facilitator Note

- Refer to the Estimating Worksheet and Acquisition Planning Estimating Worksheet Procedures.
- Toggle from the Slide Presentation to the **blank** Estimating Worksheet to populate each cell that you describe in front of the class.



Tool

- Acquisition Planning Estimating Worksheet (Excel)
- Blank Excel Estimating Worksheet
- Estimating Worksheet Procedures (for audience)

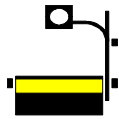




- **EXPLAIN:**
- The **Activity** column lists the five stages of the Planning process to be estimated: Business Case, Decision Support Group (DSG), Investment Review Board, Statement of Objectives, and Task Order. (*Audience: Refer to Section 4 of the Procedures.*) Enter a start date in the appropriate columns for each activity.
- **First**, fill in the project information, such as the name, sponsor, and start date. (*Facilitator: Toggle to **Excel Estimating Worksheet** and fill in a cell from each of the top columns to show location of project information.*)
- **Second**, populate the “**Rationale for Estimation,**” “**SFA Estimate,**” and “**Contractor Estimate.**”
  - The first column is the “**Rationale for Estimation,**” which will provide a detailed description of the estimate that was developed. It specifically lists the number of full-time equivalents (FTE’s) and how many days they will work, for example 2 FTE’s at 6 days. **You can derive a “Rationale for Estimation” by using other similar project actual numbers.**
  - Using the “Rationale for Estimation” column, enter the number of FTE days it will take SFA employees and the number of FTE days it will take Contractor effort to complete each activity in the “**SFA Estimate**” and “**Contractor Estimate**” columns.
  - (*Facilitator: Toggle back to **Excel Estimating Worksheet** and fill in a cell from each of the three columns mentioned above. The number of days of Contractor Effort is the total estimated number of days for each activity minus SFA employee days.*)

## Solution Acquisition Planning

### Facilitator Guide



Slide

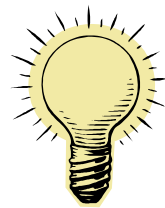
36

Team Activity

SAP



**Now it's your turn! Complete the Acquisition Planning Estimating Worksheet!**



#### Optional Estimating Worksheet Activity



Purpose

Practice using Estimating Worksheet.

**30  
min.**



**Facilitator  
Note**

- Groups should be divided into teams of 1, 2, etc.
- Encourage participants to ask questions of each other and yourself.



**Tool**

Participants should have:

- Blank Acquisition Planning Estimating Worksheet
- Estimating Worksheet Procedures



### **EXPLAIN:**

- Refer to the blank Acquisition Plan Estimating Worksheet and fill it out.
- Don't forget to use the "Acquisition Planning Estimating Worksheet Procedures" to help guide you through the process.

**Good Luck! We will review the solutions upon completion of this activity.**

# **Acquisition Estimating Worksheet**

## Sample Answer for Facilitators

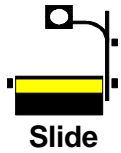
# Solution Acquisition Planning

## Facilitator Guide

Project Name:		Learning Management System (LMS)		Worksheet Start Date:		7/30/2001		Worksheet Last Updated:			
Executive Sponsor:		Anne Teresa		Worksheet Completion Date:		7/30/2001					
#	Activity	Rationale for Estimation	SFA Estimate (Days)	Contractor Estimate (Days)	Total Estimate (Days)	Total Actual (Days)	Start Date	Completion Date	Best Practice Estimate Days		
PLANNING (Vision Phase of SLCs)											
Entry Criteria: An SFA business issue in need of an IT solution is identified, and a member of the SFA Management Team is designated to oversee the development of the solution.											
1	Business Case										
	Formulate Acquisition team to develop Business Case										
	3 FTE's @ 2 days	2	4								
	Team Members Trained for Acquisition (Awareness Presentation)										
	4FTE's @ 1 days	1	3								
	Research for Business Case										
	4FTE's @2 days	2	6								
	Develop Business Case										
	2FTE@1 day	0.5	1.5								
2	Develop High Level Requirements										
	2 FTE's @ 3 days	2	4								
	Review by GM										
	2 FTE @ 5 days	4	6								
	Develop initial Acquisition Plan										
	3 FTE's @ 3 days	4	5								
	Total Business Case days										
		15.5	29.5	45	0						
3	Decision Support Group										
	Preparation										
	3 FTE's @ 1 days	1	2								
	DSG Review										
	3 FTE's @ 1 days	1	2								
	Update Business Case as Needed										
	4FTE's @4 days	3	4								
	Update Acquisition Plan as Needed										
2FTE@2 day	1	2									
4	Follow Up										
	2 FTE's @ 3 days	1	3								
	Total DSG days										
	7	13	20	0							
	Investment Review Board										
	Preparation										
	3FTE's@1 day	0.25	0.5								
	IRB Review										
2 FTE's @ 3 days	0.25	0.5									
5	Update Business Case and Acquisition Plan as Needed										
	2 FTE's @ 6 days	1.75	3								
	Follow Up										
	2 FTE's @ 3 days	1.25	2.5								
	Total IRB Days										
	3.5	6.5	10	0							
	Statement of Objectives										
	Developed										
2FTE's@2 days	1	1									
6	Request for Proposal										
	2 FTE's @ 3 days	3	5								
	Total SOO days										
	4	6	10	0							
	Task Order										
	Develop Technical Proposal										
	3 FTE's @ 3 days	2.5	4								
	7	Develop Cost Proposal									
3 FTE @ 4 days		2	4								
Review Proposal											
2 FTE's @ 3 days		1.5	3								
Negotiations											
3 FTE's @ 4 days		1	2								
Total Task Order Days											
7		13	20	0							
Task Order Awarded and Signed											
PLANNING Sub-Total											
		37	68	105	0						

## Solution Acquisition Planning

### Facilitator Guide



Slide

37

Team Activity

SAP



Review team solutions.



### LMS Estimating Worksheet Activities



Purpose

Review team solutions

6  
min.



Facilitator  
Note

- Ask each team to nominate one representative to stand and explain how many hours the team planned for their acquisition and how those hours were allotted.



Tool

- Estimating Worksheet



### **EXPLAIN:**

- Ensure each team has had time to complete a worksheet
- Allow each team to explain their answer.
- Encourage participants to explain how they came up with their answers by asking open-ended questions.